Pro'sKit®

PT-5202
Mini Grinder Set

User's Manual
1st Edition,
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THANK YOU

Thank you for investing in a Pro'sKit product. The PT-5202 mini grinder set has been engineered and made to demanding high quality standards; ease of operation and proper care of your product will give you years of trouble-free use.

Normal wear and tear, including accessory wear, is not covered under guarantee.

Warning：User must read and understand the user manual before using the product to reduce the risk of injury. Failure to follow all instructions may result in electric shock, fire and/or serious personal injury. The product must be used only for its prescribed purpose. Any use other than those mentioned in this manual will be considered a case of misuse. The manufacturer shall NOT be liable for any damage or injury resulting from such cases of misuse, use of force, partially or completely dismantled appliances.

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USE

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This manual, the tool and accessories may show these warning **symbols**：

General Hazard

Read Instructions

Keep Dry

Protect Eyes, Ears, Lungs

Keep Bystanders Away

Flying Debris

Sharp Blades

Important Safety Notes

WARNING ! When using power tools, the following safety precautions should always be followed to reduce the risk of electric shock, personal injury and fire. Read all these instructions carefully before using the tool, and save for future reference or new users.

Protect Eyes, Ears, Lungs

Important! Always wear eye protection when using this tool.

Important! Some materials can cause harm from inhalation of dust and fibers, take adequate precautions.

Workplace Safety

All onlookers and children should be kept well away from the work area and extension cables. This tool must only be operated by competent adults. When not in use, keep the tool in a secure place and out of reach unauthorized personnel, children, etc.

Avoid electric shock

Keep the cable clear of the tool while working. Do not work on or near equipment that is connected to an electrical supply. Prevent body contact with grounded surfaces e.g. pipes, radiators. Always use a trip circuit to disconnect the power supply in case of short.

Work Environment

Do not use the tool in damp or wet areas, or near inflammable liquids or gases. Always work in a well lit area. Keep the work area tidy to help avoid injuries. Sparks from within the tool and created by the materials worked on can ignite certain substances,

ALWAYS ensure there is no risk of this before activating the tool or commencing work.

Personal safety

For your protection always wear safety goggles and breathing mask, keep fingers, hair and clothing clear of moving parts. Do not overreach particularly on ladders and maintain secure footing and balance. Always be aware of the required safety precautions.

Clothing

Avoid wearing loose clothing or jewelry as they may be caught in moving parts. Wear a protective hair covering to contain long hair.

Protect the cable

Do not carry the tool by the cable or pull the cable to remove the AC/DC adaptor from the socket. Protect the cable from heat, oil, solvents, sharp objects, or anything that could damage the insulation. Never use a power tool that has a damaged cable or exposed wires.

Disconnect tools

Always ensure the power supply is disconnected when not in use.

Inspect the tool before use.

Inspect the tool for any damage, cracks or missing parts, if in any doubt do not use and consult a qualified electrician. Keep the handle dry and free form oil and grease.

Avoid Unintentional starting

Ensure the on/off switch is OFF before plugging into the power source. Do not use if distracted or tired.

The Tool stops

If the tool stops unexpectedly or appears to break down in use, disconnect from the power supply before handling moving parts.

Use Outdoor extension leads

When the tool is used outdoors, only connect to extension leads intended and approved for use outdoors. Never charge a battery outside or on an extension lead. Never use the tool in a wet environment or allow leads and cables to become wet or damp.

IMPORTANT ADDITIONAL SAFETY NOTES

1. Do not use damaged/worn or unshaped tools.
2. Do not use tools with bent shafts.
3. The tool is designed for light and intricate work. Do not use for heavy work as you may damage the tool.
4. Check the collet nut frequently for tightness.
5. Use only the accessories supplied or recommended by your dealer, other accessories may cause injury.
6. Always wear eye protection with this tool.
7. Ensure work piece is secured to prevent it from being flung or moved by the rotation of the tool.

KEEP THESE INSTRUCTIONS AND MAKE THEM AVAILABLE TO OTHER USERS AND OWNERS OF THIS TOOL !

At the end of this tool’s life please dispose of in a manner which is considerate to the environment. Ask your local council if unsure.

Features：

- Precise in various tasks.
- Compact and powerful.
- Comfort rubber grip.
- LED light.
- Keyless chuck lock button.
- Ergonomic design.
- Lightweight.
- Switch adapter included.
- 21 accessories included.
- Durable plastic case.
- Ideal for drilling, milling, grinding, polishing, engraving, cutting, and removing.

Specifications：

- No-load speed：15,000 rpm
- Collet size：Ø 3.2mm maximum
- Acoustic pressure：< 70dB
- Working voltage：18V DC
- Overall length：Ø43×127 mm
- Weight：123 g
- Switch adapter input voltage：100~240VAC 50/60Hz 0.5A Max.
- Switch adapter output voltage：18V DC 400mA
- Boxed dimensions：142x137x57mm (5.6”x5.4”x2.3")

Unpacking and Description of Parts

Read and understand all instructions before use.

Your Mini grinder set contains :

① . Case
② . Mini grinder
③ . 2 pcs Stencils
④ . 19 Tools and sanding accessories
⑤ . Switch adapter : 100~240VAC 50/60Hz 18V DC 400mA

Your adapter will be supplied with a switch adapter suitable to your region. Insert into a suitable power socket before fitting to your-PT-5202 mini grinder. Always ensure the PT-5202 mini grinder is switched off before fitting the power lead.

Fitting Tools and Operation

Observe safety notes.

Ensure tool is switched off and disconnected from the power supply.

Fit a tool

1. Hold the tool firmly, press the spindle lock, loosen the locking collar.
2. Remove previous accessory and store safely.
3. Select the appropriate accessory for the job.
4. Seat the accessory fully into the collet and tighten the locking collar firmly.

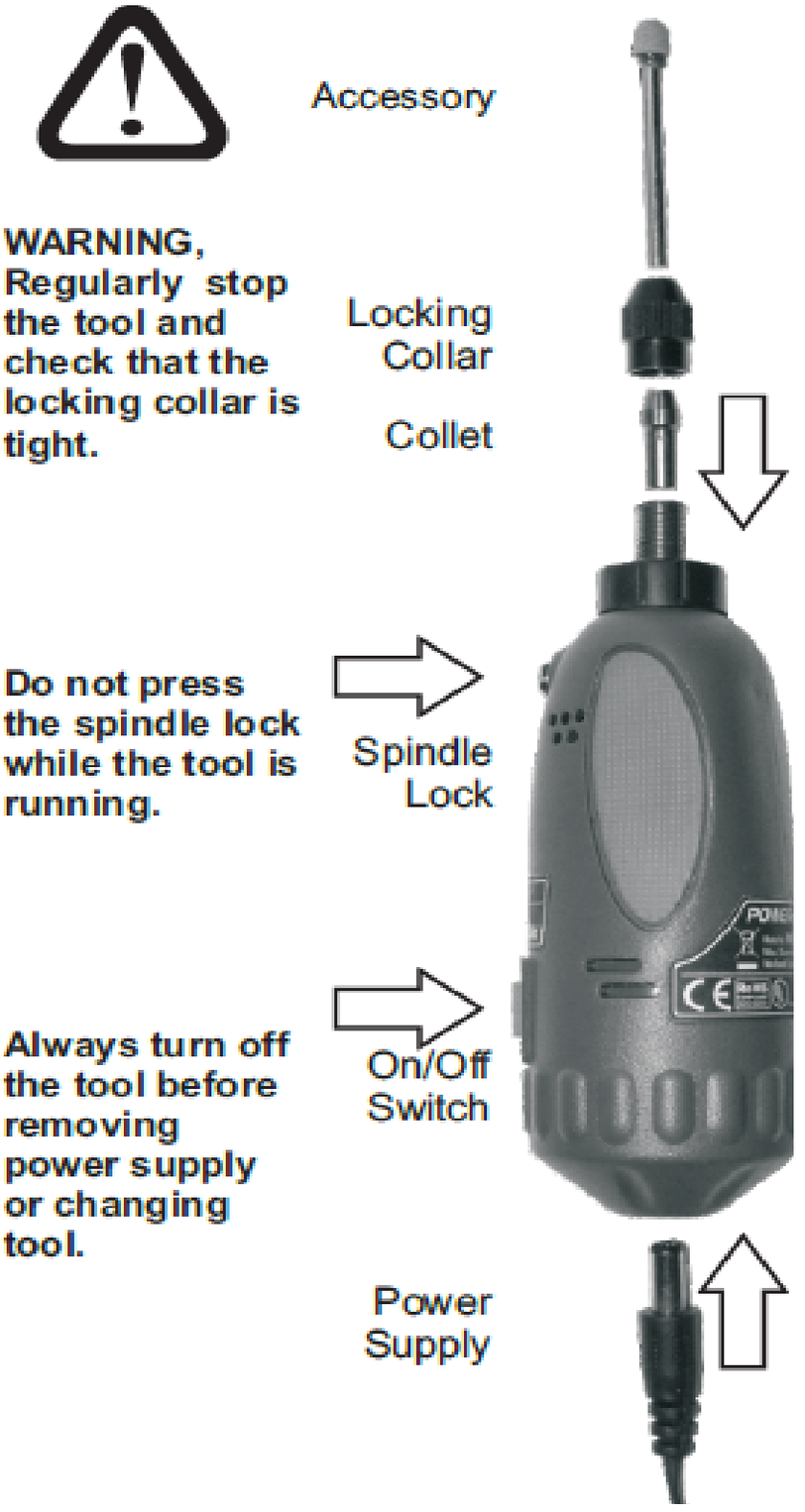
The supplied collet can hold a tool spindle up to 3.2mm. To change the collet, completely remove the locking collar, the collet can then be freely replaced and then secured with the same locking collar.

Operation

After fitting the tool, ensure the switch is in the off position and connect the PT-5202 mini grinder to the supplied power adaptor.

Starting work

1. Mark the work to be done, the supplied stencils can assist with this (they are not designed to be used with the tools directly).
2. Use a mask or guide to prevent damage to surrounding areas.
3. Hold the grinder firmly and switch on, test the tool against the surface to check action before beginning work.
4. Complete the work in stages, do not apply excess pressure or cause the tool to slow down.


Accessory
WARNING, Regularly stop the tool and check that the locking collar is tight.
Locking Collar
Collet
Do not press the spindle lock while the tool is running.
Spindle Lock
Always turn off the tool before removing power supply or changing tool.
On/Off Switch
Power Supply

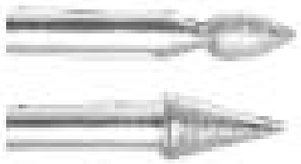
Accessories

HSS cutter

For detail engraving, carving and routing in wood, fiberglass, plastic and soft metals.

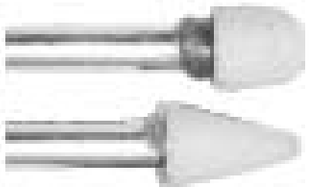
Diamond grinding point

For fine detail work, cutting, engraving, carving, touch-up and finish, use on wood, jade, ceramic, glass, hardened steel, semi-precious stones and other hard materials.

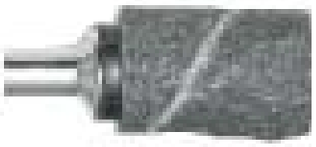


Grinding point

Use on metals, welded joints, rivets and rust. Ideal for sharpening, de-burring, rust removal and general purpose on most materials.



Sanding sleeve



For rough shaping and smoothing wood and fiberglass; removing rust from metal surfaces; shaping rubber surfaces. Sanding bands are easily replaceable on drums by loosening the compression screw.

Grinding discs

For removing burrs, narrow cuts and shaping of plastics, wood, fiberglass and soft metals. Fit the disc between the 2 rubber washers and tighten with the locking screw.

Engraving

Hold the PT-5202 mini grinder so that it is close to vertical and move at an even pace with a steady pressure. Pauses and alterations in pressure will be noticeable. Use a straight edge where possible. Try printing a sticky label with your lettering on it. Stick onto the item to be engraved and trace the outline.

Grinding

The PT-5202 mini grinder is perfect for modeling and detailing. Clamp the work piece securely, hold the grinder firmly, supporting your wrist and gradually work the area. Don’t attempt to do the job in one pass. When you need to remove more material begin with the cutting tools and finish with the grinding tools. For large jobs use a larger tool.

FAQ

When I switch the grinder on the motor doesn’t run, why ?

Check switch adapter the power is on and the plug is correctly fitted.

Why does my grinder stop sometimes ?

Don't apply too much pressure the rpm shouldn’t drop significantly on contact.

I keep slipping and have trouble controlling the grinder, what can I do ?

Make sure you use the correct tool for the application. Hold the grinder like a pen and make minimal contact with the work piece to prevent kickback. Use a mask to prevent contact outside of the area to be engraved and make sure to use sharp new tools. Only grind small amounts off with each pass, gradually working toward the required finish.

Where should I store my mini grinder ?

In a dry place at a stable temperature between 10℃ and 24℃ (50℉ and 75℉).

What should I do if my mini grinder gets wet ?

Dry fully for several days in a warm but not hot place before trying to charge or use**.**

How can I get my mini grinder repaired if it is damaged ?

Contact your retailer.

Where do I find my model number ?

On the base at the rear.

Where can I get replacement parts, advice or help ?

寶工實業股份有限公司
PROKIT’S INDUSTRIES CO., LTD.
http://www.prokits.com.tw
E-mail:pk@mail.prokits.com.tw

ISO 9001 CERTIFIED

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PT-5202 迷你電磨組

產品使用手冊

感謝你選購 Pro’sKit 產品！這PT -5202迷你電磨組是一套經過精心設計和以嚴苛的高品質標準所製造的產品，它很容易操作，經由你適當的照顧，它會提供你更多年的無故障使用。
正常的磨損和破裂，包括配件的磨損，不在保固範圍之內。

警告！使用本產品前，用戶必須閱讀並理解用戶手冊，以減少受傷的風險。如果不遵守所有的指示，可能會導致觸電、火災、和/或 嚴重的人身傷害。該產品必須僅用於其規定的用途上使用，非本手冊中提到的其他任何用途，將被視為誤用的情況。以外力拆解部份或全部產品的錯誤行為的案件，製造商將不會對任何損害或傷害的結果，承擔任何責任。

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手冊中的工具和配件，可能會顯示這些警告符號：：

危險

閱讀說明

保持乾燥

保護眼睛耳朵和肺部

旁觀者遠離

小心碎片飛濺

注意刀片鋒利

重要的安全注意事項：

警告！使用電動工具時，應始終遵守下列

安全預防措施，以減少電擊、人身傷害和火災的危險。使用這個工具之前，應詳細閱讀這些指示，小心操作，並妥善保存以供將來參考或提供給新使用者參考。

保護眼睛.耳朵和肺部

重要！使用此工具時，要始終戴著防護眼鏡。
重要！使用此工具時，應採取適當的預防措施，因為過多的吸入灰塵和纖維，可能會造成傷害。

工作場所安全
所有的圍觀者和兒童應儘量遠離工作區和延長線！該工具只能由有資格的成人操作，當不使用時，該工具應保存在一個安全，且未經授權的人員、兒童...等拿不到的地方。

避免觸電
該工具在工作時，應保持電纜的清潔！不要在連接到電力供應或設備附近工作！防止身體與接地表面接觸,如管線、散熱器...等。為預防短路危險，請務必使用具有過載自動跳閘電路的延長線，分離電源。

工作環境
這工具不要在潮濕的地方、或靠近易燃液體或氣體附近使用！通常在一個光線充足的地方工作，並保持工作區域的整潔，以幫助避免受傷。從工具內部產生的火花，和作業下產生的材料，某些物質可以被點燃，通常在啟動這工具或開始工作前，必須確保沒有任何風險存在。

人身安全
為了保護您，應隨時保持佩戴安全護目鏡和口罩，並保持手指、頭髮和衣服遠離移動中的電動工具。特別是在梯子上，不要伸得太長，並隨時保持梯腳的安全和平衡，隨時注意這些必要的安全預防措施。

注意衣物
避免穿寬鬆的衣服或飾品作業，因為它們可能捲入轉動中的部件，並需戴上帽子，保護頭髮並覆蓋長頭髮。

保護電纜
請勿用拉電線來攜帶這工具；或用拉電線的方式，從插座上拔下AC / DC變壓器；

保護電線並遠離熱、油、溶劑、尖銳的物體或任何可能破壞絕緣的物體；請勿使用一個損壞的電線或裸露電線的電動工具。

斷開電源
電動工具不使用時，請務必斷開電源。

使用前檢查工具
檢查工具是否有損壞、裂縫或缺件，如有任何疑慮，請不要使用！並諮詢合格的電氣技師；保持手柄乾燥，遠離油和油脂。

避免意外的啟動
插上電源之前，應確保on/off開關處於OFF狀態！如果注意力不集中或疲勞時，請不要使用！

停用工具
如果工具在使用中突然停止或在使用中出現破裂狀況時，應先將電源斷開後，再處理運動部件。

在戶外使用延長線
當工具在戶外使用，只能連接到保證合格的延長線才能在戶外使用！請勿使用延長線在戶外充電；請勿在潮濕的環境中使用的工具，或讓導線和電纜浸濕或受潮。

重要附加的安全注意事項
1. 不要使用已損壞/磨損或變形的工具。
2. 請勿在工具上使用已彎曲的磨頭.配件。
3. 該工具是專為輕力和複雜的工作而設計。不要使用太重的力量工作，這可能會損壞你的工具。
4. 經常檢查夾頭是否鎖緊。
5. 只能使用標準的配件或由經銷商建議或推薦的配件，其他的配件，可能造成人身的傷害。
6. 使用此工具時，請隨時佩戴防護眼鏡。
7. 請確保加工件被牢固的固定，以防止其飛散或被工具旋轉或移動。

保留這操作說明和構造，並提供給其他使用者和該工具的擁有者！

當這個工具報廢時，請用體貼保護環境的方式處置，如果不確定時，請詢問當地的主管機關。

特點：

- 適合精密的各種作業使用。
- 小巧和強力的設計。
- 舒適的軟性防滑握把。
- LED工作照明。
- 夾頭固定按鈕。
- 人體工學設計。
- 輕巧方便的結構。
- 內附電子式開關變壓器。
- 內附21種配件。
- 耐用的塑膠攜存盒。
- 適用於鑽孔、磨銑、研磨、拋光、雕刻、切割、磨除。

規格：

- 無負載轉速：15,000 rpm
- 夾頭尺寸：最大Ø 3.2mm
- 噪音：< 70dB
- 工作電壓：18V DC
- 電磨全長：Ø43×127 mm
- 電磨重量：127g
- 電子式變壓器輸入電壓：100~240VAC 50/60Hz 最大0.5A
- 電子式變壓器輸入電壓：18V DC 400mA
- 攜存盒尺寸：142x137x57mm (5.6”x5.4”x2.3")

開箱和部件的說明

使用前，請閱讀和理解全部說明。

你的迷你電模組包含：

①. 攜存盒
②. 迷你電磨
③. 2種配件：數字/字母、符號模板
④. 19種配件
⑤. 電子式變壓器：100~240VAC 50/60Hz 18V DC 400mA

在插入合適的電源插座之前，你的變壓器是用一個電子式交換變壓器的方式，用來配合於您所在地區的電壓，轉換成符合您的PT- 5202迷你電磨的電壓。

裝配與操作

裝配與操作前，請遵守安全注意事項。
裝配前，請先斷開電源，並確定電磨的電源關閉。

配件裝配

1. 緊握工具，按下夾頭固定鈕，鬆開夾頭緊固圈。
2. 取下原來的附件，並妥善保存。
3. 選擇合適的做業配件。
4. 將配件完全插入夾頭，壓下夾頭固定鈕，擰緊夾頭緊固螺帽。

標準配件中的夾頭，可以容納的研磨桿軸最大3.2mm，要改變夾頭，取下夾頭緊固螺帽，這夾頭可以被自由的替換，然後用相同的夾頭緊固螺帽擰緊。

操作

配件裝配妥善後，請確保開關處於 off 位置，再將PT -5202迷你電磨與變壓器連接。

開始作業

1. 請先完成研磨位置的標示工作，所提供的模板可以幫助完成標示工作（模板它可以幫助你不需要經過設計，就直接和工具一起使用）
2. 模板可以使用遮避或導引方式，來防止周圍區域被錯誤的標示。
3. 緊握迷你電磨，開啟電原！開始工作前，可以先對表面進行研磨測試，並檢查轉動是否正常？
4. 完成階段的工作，不要施加過大的壓力或導致迷你電磨轉速減慢。

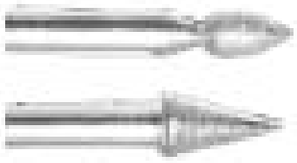
配件介紹

高速鋼銑刀

適用於精細的雕刻，可以雕刻和挖掘木材.玻璃纖維.塑料和軟性金屬。

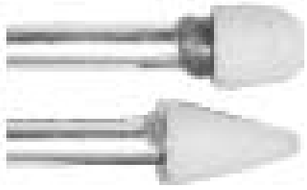
金剛石磨針

適用於精細入微的工作，可以在木材.玉石.陶瓷.玻璃.鋼材.半寶石..等硬質材料，進行切割.雕刻.刻鑿...等觸摸起來光滑.精細入微的工作。

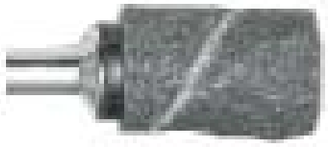


帶柄砂輪

使用在一般的大多數材料上，如金屬.焊接接合處.鉚釘.生鏽...等處，使之銳利.去毛刺.除鏽的研磨作業用。



帶柄鼓狀砂輪



適用於粗糙面的整平，木材和玻璃纖維的整平；金屬表面除去鐵鏽；橡膠表面成型。鼓狀砂輪帶是容易更換的，只要鬆開壓緊的螺絲即可。

帶柄切斷砂輪

適用於塑膠.木材.玻璃纖維.軟性金屬...等材質的去除毛刺.狹窄剪切.成形等作業。裝配時，將切斷砂輪片裝在2個橡膠墊圈之間，並擰緊固定螺絲即可。

雕刻

握緊PT- 5202迷你電磨，使其接近垂直，以均勻的速度和穩定的壓力移動，暫停和改變壓力，將會產生明顯刻痕。嘗試列印一個不干膠標籤，將你的文字刻在它上面，緊固的黏貼後，在可能的情況，可以利用直尺協助，進行雕刻和繪製輪廓。

研磨

這PT -5202迷你電磨，對於製作模型和精細作業是一項完美的工具。請先牢固的夾緊加工物件，保持迷你電磨的穩固，支撐你的手腕，然後逐步研磨整個區域。當你需要去除許多的材料時，不要試圖一次完成所有的工作，應先用迷你電磨的切削工具，再用研磨的方式完成。對於大型作業時，應選用一個更大的工具。

常見問題

為什麼當我啟動迷你電磨的開關後，馬達不會轉動？

請檢查電子式變壓器的電源是否正常？和插頭是否已正確的插妥？

為什麼我的迷你電磨有時會停止不動？

不要施加太大的壓力，去接觸和研磨，轉速就不會顯著的下降。

我一直打滑和迷你電磨難以控制，我能做些什麼？

請先確認您使用了正確的工具，在您的作業應用上！握住迷你電磨就像一支鋼筆，並與加工物件最小的接觸，以防止打滑迴旋。使用口罩，以防止接觸到雕刻後飛濺出來的雜屑，並確保使用鋒利的新配件，並且只可以允許少量的研磨，然後逐步的作業,慢慢的接近到完成您所需的光潔度。

我應該在哪裡儲存我的迷你電磨？

迷你電磨應存放在10~24℃(50~75℉)之間，溫度穩定且乾燥的地方。

如果我的迷你電磨受潮，我應該怎麼做？

在您想充電或使用前，需先在一個溫暖但不熱的地方充份的乾燥數日後，才可以使用。

如果我的迷你電磨損壞了，我怎樣才可以維修？

請儘速與您的零售商聯繫。

我在哪裡可以找到我的產品型號？

在底部的後方。

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